

# MALAWI



## 1. INTRODUCTION

Malawi is one of the poorest countries in the world with a *per capita* Gross National Income of US\$160<sup>1</sup>. The country is classified as a Least Developed Country by the United Nations and a Highly Indebted Poor Country by the World Bank. The country has a narrow economic base with no mineral resources and is heavily dependent on agriculture. Nearly 90% of the rural population derive their livelihood from agriculture. Agricultural produce account for 90% of Malawi's export<sup>2</sup>

The agricultural sector has deteriorated in the past ten years. 80% of the country's population lives in rural areas where access to basic social services is severely limited. The country is very densely populated with a very high rate of forest loss and a fragile environment.

Poverty is widespread in both rural and urban areas with nearly half of Malawi's population struggles to live on less than \$1 a day and income distribution is very unequal. A continuing food crisis in Malawi afflicts more than 4 million people—and more than a million of them are children under age five or pregnant women. Food insecurity is not only a major cause of malnutrition, but has also worsened the risk for diseases such as cholera and AIDS<sup>3</sup>.

Table 1: Basic Economic Indicators, Malawi, 2005

Population (2005)	12,900,000
Languages	Official language: Chichewa, other languages: Chinyanja, Chiyao, Chitumbuka, Chisena, Chilomwe, Chitonga.
2005 Economic activity (% of GDP)	Agriculture: 34.7 ;Industry: 19.4 ; Services: 45.9
Human Development Index	0.400 (2004)
Per capita Gross National Income	2004: 160 USD; 2005: 160 USD

## 2. EDUCATION SYSTEM

Malawi has an 8-4-4 education system consisting of primary school, secondary school and university education. This is the duration of compulsory education. Most children start formal education at primary school at the age of six. The primary school takes 8 years from Standard 1 to 8 at the end of which pupils write the Primary School Leaving Certificate examinations. The introduction of Free Primary Education in Malawi has seen a large increase in the number of pupils going to primary school but this increase in access has also brought major infrastructure problems and a big decline in quality.

Secondary school education takes 4 years from Form 1 to Form 4. Students can attend secondary school in public schools run by the government or in private schools run by the private sector and individuals. The quality of secondary education varies widely in both sets of

schools. In general, fees in private schools is more than 50 times that in public schools. For along time, secondary education was very restrictive in Malawi but this situation is changing positively due to rapid expansion of private schools as well as government run community day secondary schools.

Malawi has two universities: the Universty of Malawi which opened in 1965 and Mzuzu University which opened in 1997.

Technical and training colleges offer courses in such fields as Forestry, Marine Science, Social Welfare and Hotel Management, as well as in various trades. These courses lead to certificates awarded after studies lasting between six months and four years.

Primary school teachers are trained in primary teacher training colleges. The Malawi Institute of Education provides introduction courses to give school-leavers the basic skills to act as "assistant" or "pupil teachers". Secondary school teachers are trained at Chancellor College that offers a four-year educational programme and at a college of education for secondary school teachers at Domasi in Zomba. The Mzuzu University that now trains secondary school teachers<sup>4</sup>.

Table 2: Education Indicators, 2004

Enrolment in Primary Education (% gross)	125(2004)
Enrolment in Secondary Education (% gross)	29(2004)
Transition to Secondary	76(2003)
Enrolment in Tertiary Education (% gross)	0.4(2004)
Gender Parity Index (GPI)	1.02 in primary; 0.81 in secondary; 0.54 at university (2004)

Primary school enrolment rates remain high, with no gender gap<sup>5</sup>. However the education system in Malawi faces many challenges in most areas including areas of access, equity, quality and internal efficiency. HIV/AIDS affects nearly a million people, including 83,000 children. Nearly a third of infected mothers pass the virus to their babies. Half of Malawi's 1 million orphans have lost one or both parents to AIDS. Child abuse, sexual exploitation and child labour are serious problems, especially among girls and orphans.

Malawi's economy also suffers a serious skills deficit, especially in the ICT sectors. Malawi reportedly has 20 skilled librarians of which only 20% have ICT skills<sup>6</sup>.

### 3. INFRASTRUCTURE

As is the case with most other developing countries, Malawi faces a number of infrastructure, human and financial resource constraints to the development of its ICT sector which include: an under-developed ICT infrastructure, high cost of telecommunications as well as unstable and unreliable power.

Table 3: ICT Infrastructure Indicators, 2005

Fixed line subscribers (2004)	93.0 per 1000 persons
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Mobile subscribers	222 per 1000 persons
Dial-up subscribers (2005)	16.2 per 1000 persons
Broadband subscribers (2004)	0.0
Internet users (2004)	46.1 per 1000 persons
Television broadcast stations	1 (2001)
Radio stations	AM 9; FM 5; Shortwave 2 (2001)

Malawi adopted a Communication Policy in 1998 which has universal access, rural connectivity, liberalization and private sector involvement involvement as key objectives. It established a Malawi Communications Regulatory Authority (MACRA).

## 4. POLICY FRAMEWORK

### 4.1 Vision 2020

Malawi developed in a visionary policy statement which states that '*by the year 2020, Malawi as a God-fearing nation will be secure, democratically mature, environmentally sustainable, self reliant with equal opportunities for and active participation by all, having social services, vibrant cultural and religious values and being a technologically driven middle-income economy*'. The policy statement has a dedicated human resource development component which state that Malawians aspire to have adequate and good quality social services especially education and health; and efficient and effective utilization of human resources in both the public and private sectors<sup>7</sup>. Vision 2020 sets the conceptual parameters for subsequent policy including national ICT policy.

### 4.2 National ICT for Development Policy<sup>8</sup> (ICT4DP)

A number of existing policies, legislation and programmes have in one way or other informed and fostered the development of this ICT4D Policy as well as the Communications Act, Science and Technology Act, establishment of School Net Malawi, the removal of import duty on pre-assembled computers and printers, the introduction of computer studies in secondary school curriculum and the establishment of Government Wide Area Network (GWAN).

After initial support from the United Nations Economic Commission for Africa (UNECA), who assisted with the development of a national ICT policy framework report, the Government of Malawi adopted a National ICT for Development Policy in December 2005.

The policy seeks to address an array of problems faced by the Malawian economy and society which include:

- Inadequate market information flow especially on small domestic markets.
- Brain-drain in the ICT Sector due to low remuneration packages. Essentially, the brain-drain is
- at two levels, namely; from Malawi to other countries especially within the SADC region and from the public sector to the private sector.
- Inadequate institutional capacity at national, sectoral and organizational levels.
- Negative attitude towards technology change.
- Underdeveloped telecommunications infrastructure especially in the rural areas.
- Outdated laws that support ICT development, deployment and utilization.
- Fragmentation of administrative and political leadership in the ICT sector.
- Proliferation of sub standard ICT schools, syllabi and service delivery.

- Underdeveloped Research and Development capacity in ICTs.
- Underdeveloped ICT Private Sector.

Its vision is for an ICT-led Malawi and its mission is to facilitate the creation of an enabling environment for efficient, effective and sustainable utilisation, exploitation and development of ICTs in all sectors of the economy in order to attain an information rich and knowledge based society and economy. This policy has a dual focus. It aims at developing the ICT industry and sector; and promoting the development and use of ICTs in all sectors for the greatest impact in socio-economic development. It is focused on eight thematic areas; namely: Strategic ICT Leadership, ICT in Human Capital Development, ICT in Governance, ICT's Growth Sectors as identified in Malawi Economic Growth Strategy (MEGS). ICT Infrastructure Development, Community Access to ICTs, and responsive ICT Legal, and Institutional regulatory framework. All these areas are deemed necessary for ICTs to enhance rapid growth of the economy.

The policy contains a dedicated section on human capital development and education.

The objectives here include

- To facilitate the deployment, utilisation and exploitation of ICT within the educational system in order to improve access, quality, relevance and delivery at all levels.
- To achieve universal basic ICT literacy and improve the level of ICT literacy in the country
- To transform Malawi into an information and knowledge-driven ICT literate nation
- To improve the management of education systems through the utilisation of ICT

Some of the strategies to achieve these objectives include

- Mainstreaming ICTs throughout the entire educational system to promote life-long learning.
- Ensuring that primary and secondary schools and colleges have adequate and reliable computers.
- Building facilities to promote ICT training and computer-aided training at all levels of education including Primary Schools and Nurseries.
- Intensifying ICT education and training in all training institutions.
- Encouraging collaboration between local and international educational institutions in order to facilitate educational exchange and the promotion of ICT education and training.
- Facilitating collaboration between the Ministry of Education and various accreditations
- Introducing ICT technical colleges in all regions of the country.
- Promoting e-learning and e-teaching including e-distance education, training and virtual learning systems to complement and supplement face-to-face campus, televised and broadcast education and training systems.
- Ensuring that all local universities and colleges take steps to progressively offer their programmes and courses on-line to broaden access to higher education to a large section of the population.
- Promoting awareness on available opportunities to enable students, teachers and educational institutions to purchase ICTs.
- Facilitating the automation of libraries as a tool for e-research and e-learning.
- Setting up special libraries to support ICT Research & Development.

- Developing user-friendly electronic educational management information systems to improve the quality of management of educational institutions.

Based on its severe skills shortage the policy also contains an accelerated plan for human resource development in order to promote and improve Research and Development capacity in ICT target the development and enhancement of technical, managerial and operational skills in the use and deployment of ICTs in the public, private and informal sectors To develop a pool of professional ICT workforce with emphasis on critical skill areas and to improve the human resource development capacity of the nation's public and private universities and colleges offering ICT courses and research.

It further contains strategies to reach under-served disadvantaged communities such as the promotion of local content and applications in the ICT sector to meet the needs and requirements of the nation, encouraging networking with the print and electronic media, providing support for broadcasters ICT interventional programmes that mobilize the communities to participate in ICTs, sensitizing and train rural and peri-urban communities in the use of ICTs as information sources.

It has a specific objective the building of the capacity of women, the youth and other disadvantaged groups to implement ICT initiatives with dedicated strategies and funding to support this objective.

### *Policy Implementation*

The implementation of the policy will be centrally coordinated and supported by key sector agencies and institutions. The following institutions or agencies will play a central role in the coordination of implementing the ICT4D Policy:

- Ministry responsible for ICT matters,
- The Department of Information Systems Technology and Management Services (DISTMS),
- Malawi Communication Regulatory Authority (MACRA), and
- The National Information and Communication Technology Council (NAICT).

Ministry of Education's responsibility will be to promote and facilitate the ICT skills acquisition and utilization in all areas and levels of education and training in order to eliminate illiteracy in the country while the Ministry of Gender, Child welfare and Community Service will ensure that disadvantaged and marginalized communities participate fully in the information society through specific ICT initiatives. The Ministry of Youth, Sports and Culture is responsible for promoting the active participation of boys, girls, women and disadvantaged groups in the information society through ICT clubs and other ICT promotional incentives. In addition, Malawi also established the National Information and Communication Technology Council (NICTC) which is a national body chaired by the President or the Vice President with the mission to provide national leadership on all matters relating to the development of the Malawian information society. The Malawi Information and Communication Technology Agency (MICTA) was also established as a statutory and autonomous national agency to act as the national ICT implementation and coordination body under the direct supervision of the NICTC and act as its secretariat.

## **5. MAJOR INITIATIVES**

There are a few noteworthy initiatives in Malawi which attempt to 'bridge the digital divide'. Many of these initiatives are dependent on donor funding from groups such as the World Bank,

Swedish International Development Agency ((SIDA), Department For International Development (DFID), Japanese International Co-operation Agency (JICA) for most of their ICT activities

### 5.1 Computers for African Schools Malawi (CFAS) | [www.cfas.org.uk](http://www.cfas.org.uk)

The 'Computers for Malawian Schools' scheme is jointly administered by the British Council and SchoolNet Malawi, which is a registered trust within the SchoolNet Africa organisation. The scheme's administrative committee is made up of academic and business representatives, as well as Ministry of Education and British Council personnel.

- The British Council receive the goods exempt of duty in Lilongwe. They are transferred to the SchoolNet facilities in Blantyre where the SchoolNet staff check, process and repair the equipment. Microsoft OS and MSOffice suite are installed by agreement with Microsoft. The SchoolNet team also set up the computers at the recipient schools.
- As in all recipient countries strict criteria are applied to the candidate schools to ensure they have the right facilities and security to house the equipment. Each school receives around ten to fifteen computers and a printer. Training of the teachers in IT has been arranged by the British Council and UK trainers have been out to Malawi to carry out IT teacher training courses.
- In conjunction with the scheme the Malawian Ministry of Education has developed an IT curriculum which pupils follow.
- Schools are also encouraged to ensure long term self-sustainability for the facilities through their PTA. They are encouraged to raise money to replace or add to their equipment through fundraising, community use of the facilities and if necessary asking parents for small contributions.
- Each recipient school is required to give a report on its experience with the computers and is subject to audit.
- The committee's objective is to have an IT lab in all secondary schools with electricity by the end of 2008.

Information on the scheme in Malawi is shown on the Schoolnet Malawi website and a list of recipient schools is shown on the Malawian schools page.

### 5.2 Malawi Library Information Consortium | [www.malico.mw](http://www.malico.mw)

MALICO was established in May 2003 MALICO as a consortium of organizations that combines its talents and resources to promote and deliver library and information services for Malawi and the global community. Its institutional membership organization participates in the acquisition and delivery of relevant electronic resources. MALICO's mission is also to offer leadership in library cooperation, training and development, mechanisms for improved access to information and a capacity for members to respond to the information needs of the country.

Among the consortium's objectives include to encourage national, regional and international cooperation among information stakeholders in Malawi; to influence information policy in Malawi; to promote adequate ICT infrastructure for members, especially sufficient internet bandwidth; to assist in the development of appropriate ICT skills at all levels; to facilitate access to electronic journal articles in international databases, to organise and digitise Malawian content and to provide information consultancy.

Malico has initiated a few projects such as *its 4 VSAT Project*. With the support of the Open Society Initiative for Southern Africa (OSISA) and with supplementary funding from the Open Society Institute and the World Bank and the University of Malawi Dossani Trust, Malico bought 4 VSATs which were mounted on 3 University of Malawi campuses and at the Mzuzu University in February 2005. This lays the basis for Malico to support the planned National Education Research Network (NREN)<sup>9</sup>.

Malico contributes to subscription of e-resources by PERI and the electronic Information for Libraries (eIFL). They also access e-resources from a host of institutions such as the WHO, FAO, INASP, CTA.

They also assist with digitizing Malawi publications. For instance the College of Medicine has digitised over 300 Malawian publications, and University of Malawi has reportedly bought digitisation equipment. This project also involves creating institutional repositories through post graduate degree programs.

Malico also has an *Internet for Influence Program* which was initiated by the British Council in which librarians train various groups on how to use computers and access the Internet. Training programs included women members of parliament, young women leaders, lawyers and journalists.

*Malawi Research and Education Network (MAREN)* is another project of Malico which involves establishing high speed internet connectivity among tertiary education institutions. National Research and Education Networks are national organizations in Africa and elsewhere representing groups of tertiary education institutions. Their mandate includes improving Internet connectivity for members. In several cases, these organizations are also involved in other activities, but all of them are actively involved with Internet Connectivity. MAREN is also one of the founding members of the UbuntuNet Alliance for Research and Education Networking. MAREN has two founder members: the University of Malawi and Mzuzu University. Two other institutions are in the process of joining: National College of Information Technology (NACIT), a tertiary institution; and the Department of Agricultural Research, a research institution. These institutions are on several locations from north to south of Malawi. Two new universities are likely to join within the year. Currently, MAREN falls within the framework of MALICO, the Malawi Library and Information Consortium.

### 5.3 National Library Services

The National Library Services has 10 branches throughout Malawi, many of whom are in rural areas with no electricity. The National Library Services also has a *Mother and Child Project* which aims at encouraging mothers to read and tell stories to their children, has introduced computer games and lessons so that the children are encouraged to learn how to use computers at a very early stage.

The NLS has also established the Baobab Project which involves offering ICT services which includes offering 2 low cost PCs operating on low power for each library. These computers are run on solar panels or wind turbines with a high battery life.

### 5.4 SchoolNet Malawi | [www.schoolnetmalawi.org](http://www.schoolnetmalawi.org)

SchoolNet Malawi is a Non-Governmental non profit making organisation formed to provide and facilitate access to Information and Communication Technologies (ICTs) in Malawian schools. The ICT for schools concept is very new in Malawi and the initiating organisation itself is still in the conception stage. The ICT development for schools concept was hatched after the SchoolNet Africa Cape Town Declaration (September 1999) represented by 10 African countries of which Malawi was represented. This initiative was facilitated by International Development Research Centre (IDRC) and SchoolNet South Africa. The vision of the SchoolNet Malawi is to give Malawian children both at the Primary and Secondary level opportunity to learn about new technologies in the field of Information Communications Technologies (ICT) in order to compete in the global knowledge based economy. In line with the Ministry of Education policy of equitable access to education opportunities, SchoolNet Malawi aims at providing and facilitating ICT development in schools. SchoolNet Malawi aims at providing and facilitating

access to cost effective, appropriate and quality information technological opportunities so that Malawian children are able to compete and succeed in the tomorrow's global information technological economy.

In providing and facilitating access to information and communication technologies to schools, the organization has the following objectives:

1. To Market, lobby ICT development initiatives to schools, CBOs, private sector and the donor community.
2. To establish a well functional, transparent organisation that is capable of implementing ICT development in Malawi.
3. Building sustainable Human resources capacities that are able to effectively implement the set programmes.
4. To provide schools with connectivity learning facilities, locally and internationally.
5. Collaboratively with the Ministry of Education supplement the current schools education system with ICT content and curriculum.
6. Research and create ways of strengthening the development ICTs in Malawi.
7. To develop a well functional, sustainable technical distribution and support centre that is capable of providing service to the whole nation.

SchoolNet Malawi sources second hand PCs from various agencies such as Computer Aid International, Computers for African Schools and World Computer Exchange and refurbishes and distributes them to Malawian schools based on detailed selection criteria. The organization also conducts training programs for both the teachers and students after each successful distribution phase. Teachers and students are trained how to use basic applications, the Internet and email for correspondence. They are also taught how to create a web site for their schools using

As a partner of SchoolNet Africa, SchoolNet Malawi also participates in SchoolNet Africa programs such as its Campaign for 1 Million PCs, ThinkQuest Africa, now called Mtandao Afrika supported by Microsoft's Unlimited Potential program. The Mtandao Afrika program involves both the students and the teachers and provides them advanced knowledge on how to create personal web sites in the local language and this is also some sort of a competition. The winners have a camping holiday in an African country. The participants are also given certificates of participation.

In 2006, SchoolNet Malawi partnered with Malawi Open Source Society to lobby and advocate for the use of open source in schools. Together they hosted a workshop with the support of OSISA in early 2006<sup>10</sup>.

Schoolnet Malawi also employ volunteers on both technical and training side. Volunteers assist with testing and maintaining computers and pack them for distribution in schools. Volunteers also assist with providing training to teachers and students.

The organization also helps develop websites for schools. To date six schools have their own websites supported by SchoolNet Malawi.

SchoolNet Malawi's partners include the British Council Malawi, Computers for Africa (CFAS), ComputerAid International, Old Mutual, Malawi Telecommunications Limited, Reserve Bank of Malawi, ComputerLand Limited, Microsoft South Africa, Open Society Initiative for Southern Africa(OSISA) and SchoolNet Africa. To date SchoolNet Malawi has sourced, mainly second hand computers from their partner organisations and have refurbished and distributed these to some schools in the country.



Since its inception in 1999, SchoolNet Malawi has distributed more than 832 computers to 50 participating schools<sup>11</sup>

#### 5.5 University of Mzuzu | <http://www.mzuni.ac.mw>

Offers Library and Information Science and ICT degree programs

### 6. ENABLING AND CONSTRAINING FACTORS

The table below provides a brief overview of the current stage of development on ICTs in education in Malawi.

Variables	Enabling	Constraining
Policy Framework & Implementation	Malawi has a national ICT policy which includes significant dedication to ICTs in education and human capital development.	
Advocacy Leadership	Malawi has champions for the cause of ICTs for development at the highest level in government, in various government ministries and within civil society and the local private sector.	
Gender Equity re access to ICTs	The national ICT policy mentions a stated commitment to gender equality and women's empowerment. The policy also allocates responsibility for the promotion of girls and women through the use of ICTs with the Ministry of Gender. Malawi also has a number of leading women champions promoting ICTs in education who serve as worthwhile role models	
Infrastructure & Access	Malawi's national policies promote a commitment to universal access and a range of organizations and groups have made headway in improving the country's ICT infrastructure	Malawi has a very poor and under-developed ICT infrastructure and very low levels of ICT access in education institutions
Collaborating mechanisms	Malawi's national ICT policy refers to dedicated inter-governmental	

	structures to promote collaboration in the realization of policy objectives	
Human Resource Capacity		Malawi has extremely limited human resource capacity exacerbated by very high levels of illiteracy
Fiscal Resources		Malawi's ICT for development strategy is strongly dependent on external donor funding.
Learning content	Malawi's information services and library organisations have made headway in digitising Malawian publications	Not much digital education content based on the local curriculum frameworks is available in Malawi's education institutions.
Procurement regulations	Malawi has legislated a tax waive on the import of computers and accessories	
Attitudes	The leadership of Malawian government, local private sector and civil society have demonstrated an enthusiasm and positive attitude in promoting ICTs for development in general and in education in particular.	



## Contacts

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## End Notes

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<sup>2</sup> Ministry of Education and Malawi Commission for Unesco (2004): The Development of Education in Malawi. 2004 Report Prepared for the 47<sup>th</sup> Session of the International Conference on Education 07-11 September 2004.  
<http://www.ibe.unesco.org/International/ICE47/english/Natreps/reports/malawi.pdf>

<sup>3</sup> UNICEF [http://www.unicef.org/infobycountry/malawi\\_2424.html](http://www.unicef.org/infobycountry/malawi_2424.html)

<sup>4</sup> <http://www.sdn.org.mw/edu/new/education-in-malawi.html>

<sup>5</sup> UNICEF [http://www.unicef.org/infobycountry/malawi\\_2424.html](http://www.unicef.org/infobycountry/malawi_2424.html)

<sup>6</sup> Salanje, G (2006) "The role of librarians in bridging the digital divide in developing countries. The Case of Malawi. Presentation at 32<sup>nd</sup> IAMSLIC Annual Conference 9-12 October 2006, Portland, Oregon, USA <https://darchive.mblwhoilibrary.org>

<sup>7</sup> <http://www.sdn.org.mw/~esaias/ettah/vision-2020/>

<sup>8</sup> <http://www.malawi.gov.mw/publications/nationalICT4DPolicy.htm>

<sup>9</sup> Ngwira, M (2006): Malico VSAT Network Initiative is Implemented!, in OpenSpace February 2006, Open Society Initiative for Southern Africa. South Africa.  
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<sup>10</sup> Nyirenda B (2006): SchoolNet Malawi and MOSS launches the use of FOSS in Malawi Schools. in OpenSpace February 2006, Open Society Initiative for Southern Africa. South Africa.  
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<sup>11</sup> Salanje, G (2006) "The role of librarians in bridging the digital divide in developing countries. The Case of Malawi. Presentation at 32<sup>nd</sup> IAMSLIC Annual Conference 9-12 October 2006, Portland, Oregon, USA <https://darchive.mblwhoilibrary.org>